

Baton Rouge Community College

Academic Affairs Master Syllabus

Date Approved or Revised: July 16, 2005

Course Name: Chemistry II Lab for Non-Science Majors

Course Number: CHEM 131L

Lecture Hrs. 0

Lab Hrs. 2

Credit Hrs. 1

Course Description: Covers basic laboratory skills and provides an opportunity for students to conduct investigations which will reinforce the principles learned in Chemistry 131.

Prerequisites: CHEM 130 and CHEM 130L

Co-requisites: CHEM 131

Suggested Enrollment Cap: 24

Learning Outcomes: Upon successful completion of this course, the student will be able to:

- Demonstrate a basic understanding of laboratory skills and operations that reinforce the content areas of Chemistry 131 lecture
- Demonstrate the techniques of working safely and collaboratively in a laboratory environment
- Organize data from legible and complete experimental records, using appropriate and adequate methods of representing data on laboratory reports;
- Use the scientific method to design, conduct, and interpret basic laboratory experiments relevant to course content and to write concise and comprehensive laboratory reports in standard English

Assessment Measures: Instructors may use a variety of assessment measures to assess student performance. But, the following assessments will be used in all sections:

- Individual instructor-designed exams will collectively assess a portion of the learning outcomes and will be administered during the semester as listed in the course syllabus.
- Individual instructor and collaborative department-designed comprehensive final exam, adhering to a department-determined content, will assess a portion of the learning outcomes.
- Individual instructor-designed or collaborative instructor-designed assignments will be given as a portion of the total grade and will include pre- and post-laboratory assignments, laboratory reports, projects, homework, and quizzes; all assignments will be graded using an instructor-designed rubric.

Information to be included on the Instructors' Course Syllabi:

- **Disability Statement:** Baton Rouge Community College seeks to meet the needs of its students in many ways. See the Office of Disability Services to receive suggestions for disability statements that should be included in each syllabus.
- **Grading:** The College grading policy should be included in the course syllabus. Any special practices should also go here. This should include the instructor's and/or the department's policy for make-up work. For example in a speech course, "Speeches not given on due date will receive no grade higher than a sixty" or "Make-up work will not be accepted after the last day of class."
- **Attendance Policy:** Include the overall attendance policy of the college. Instructors may want to add additional information in individual syllabi to meet the needs of their courses.
- **General Policies:** Instructors' policy on the use of things such as beepers and cell phones and/or hand held programmable calculators should be covered in this section.
- **Cheating and Plagiarism:** This must be included in all syllabi and should include the penalties for incidents in a given class. Students should have a clear idea of what constitutes cheating in a given course.
- **Safety Concerns:** In some programs this may be a major issue. For example, "No student will be allowed in the safety lab without safety glasses." General statements such as, "Items that may be harmful to one's self or others should not be brought to class."
- **Library/ Learning Resources:** Since the development of the total person is part of our mission, assignments in the library and/or the Learning Resources Center should be included to assist students in enhancing skills and in using resources. Students should be encouraged to use the library for reading enjoyment as part of lifelong learning.

Expanded Course Outline:

- I. Chemical Reactivity
 - A. Classes of Chemical Reactions
 - B. Molecular Weight Determination of a Gas
- II. Acids and Bases
 - A. Indicators in Nature
 - B. Acid Neutralization by Antacid
- III. Organic Chemistry
 - A. Identification of hydrocarbons
 - B. Properties of organic compounds
 - C. Synthesis of esters
- IV. Biochemistry – Test for Vitamin C
- V. Chemistry of Water and Air Pollution
 - A. Lead Detection
 - B. Analysis of Fertilizer

